

Aviation News

McGRAW-HILL PUBLISHING COMPANY, INC.

SEPTEMBER 27, 1943 50 CENTS



Directs Record Air Expansion: Vice Admiral John S. McCain, Deputy Chief of Naval Operations (Air), who dispatches scores of new planes to fighting fronts. Navy's air fleet is growing more rapidly than the Army's.

DSC Aids Old Condor Line
Agency sending new Douglasses, repair and maintenance parts, and personnel to Rio to build up Brazilian national airline.



CAB Issues Overseas Mail Report
Estimates 142 to 235 planes could carry all the first class mail transported by air and surface between U.S. and foreign countries.



Aircraft Employment Is 1,600,000
Industry now employing 1,600,000, with thousands more to be hired; 1943 to see about 85,000 planes.



U.S. Chamber Asks Free Transit
Association accepts 10-point recommendation for unrestricted flight of commercial aircraft over all countries after the war.



Big Air Push Near in Pacific
Navy to receive new plane types in coming months to swell already heavy flow to entire Pacific arena.



Airline Dividend Prospects
Financial commentator says lines are expected to concentrate on ploughing back earnings in coming months rather than declare new dividends for stockholders.



Industry Holds Post-War Meeting
Top executives of aviation assemble at Colorado Springs and chart conversion to peacetime operations and long-range objectives.



OUR FAVORITE MURKIN
—Pilot Instruments, **WORLD'S SAFEST**—Aviation
Gen. Electric, Communication Equipment **WORLD'S SAFEST**
—Albright Lippert Carburetors **WORLD'S SAFEST**—Aviation
Igloos, **WORLD'S SAFEST**—Klockt Control, Lancia
Gear, Stromberg Automotive Carburetors, **WORLD'S SAFEST**
—Ansett Starters, Operational Aeroline, **WORLD'S SAFEST**
—Wester Instruments, **WORLD'S SAFEST**—Squint, Control.



BACK OF OUR BOYS
BUY WAR BONDS

ARMED FORCES BUY BONDS
BONDS BUY ARMED FORCES
TODAY BUY BONDS BUY BONDS

THE AVIATION NEWS

Washington Observer

FIRE TO AERO CHAMBERS—President Roosevelt's kind words in his letter to Jim Murray, president of the Aeronautical Chamber at the opening of the Chamber's Economic Development Committee meeting in Colorado Springs, where post-war aviation was considered, caused some eye-brow lifting in Washington and industry circles. It was particularly interesting in view of the recent fact that same group received from two high administration officials at a luncheon meeting in Washington several weeks ago.

GO HOME AND MAKE AIRPLANES—Leading industry representatives gathered to hear Under-Secretary of War Patterson and Under-Secretary of the Navy Forster discuss post-war aviation planning—or so they thought. The under-secretaries, individually and collectively, studiously avoided any discussion of post-war planning and indicated to the assembly it would be well for the aircraft men to get back to building airplanes instead of sitting at a luncheon in Washington to listen to a discussion of war to peace transition and post-war problems. FDR's letter assumes importance in view of that embarrassing incident.

COMBAT PLANE REPORT AGAIN—It's all pretty confusing trying to keep track of that report on our combat planes which was compiled by the Office of War Information and which has been first ready, then not ready and then ready and then not ready again. The latest report—as this is written—is that it is going to be more revealing and detailed than first planned. Both Army and Navy, anxious to tell the story of their planes, have now assigned officers to the writer of the report to sit in getting more information to the public on the war in the air. Release time is now uncertain.

NEW APPROACH—In an attempt to reduce uncertainty among war contractors on contract terms, negotiations, and transition to peacetime production, the War Department is said to be considering changing meetings of top labor leaders and war contractors to give these the low down on our military needs. The idea, of course, is to keep production up and it sounds like a good one.

DE SEVERINSKY—Aviation and journalistic circles in the capital were interested and surprised to learn that the New York Times has

subscribed to a new military aviation column to be written there weekly by Maj. Alexander P. De Seversky. Seversky, a controversial figure with rabid followers and rabid detractors, starts his new project next month. The Times has its own military experts and rarely subscribes to outside service, particularly cavalry.

NAVY AT MIDWAY—The fall of the key naval airfield at Midway has been represented largely as an Army action, but reports from the South Pacific indicate that Navy and Marine Corps planes made up about two-thirds of the forces employed in those air operations which were on a scale unprecedented in that area. While all weapons of the air were used in the attacks, the bombing attacks were generally carried out by Navy Douglas Dauntless dive-bombers and by Grumman Avenger torpedo-bombers equipped for land assaults.

NAVAL AVIATION—The vast expansion of the Army Air Forces is new almost as old, if even interesting, story to everybody. But naval aviation, which has been the target for considerable criticism from time to time, has been



Grumman Wildcats and Wildcats.

quietly doing a job of its own and aviation people feel well informed and considered it highly significant that the Navy's recent production report started out the aircraft section by stating: "Navy's aircraft production is the fastest expanding segment in the nation's air-power building program," and after citing some figures

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3. Cabin temperature (both super-charged and normal.)
4. Carburetor air temperature.

Upon request, engineering data will be furnished to manufacturers requiring controls for the above or other temperature control applications.



WHITE-RODGERS ELECTRIC COMPANY
SAINT LOUIS, MO.



Aviation News
McGraw-Hill Publishing Co., Inc.

SEPTEMBER 27, 1945

VOLUME 1 • NUMBER 9

CAB Says 142 to 235 Transports Could Fly All Overseas Mail

Report released by research and analysis division expected to furnish basis for future planning, although separate report on passenger potential is under way.

By MERLIN NICKEL

One of the yardsticks—perhaps the most important—by which the Civil Aeronautics Board may measure the need and nature of international air routes from this country has been provided through a comprehensive study of United States overseas mail by the Research and Analysis Division of the Board's Economic Bureau.

Based on conservative appraisals, the survey disclosed that at least 142 planes and possibly as many as 235, could carry all the first class mail now carried by sea between the United States and overseas countries, depending on geographical coverage and assuming daily scheduled frequency.

Based on DC-3 Basis—Though the report did not so state, the reference was understood to be in planes of the approximate capacity of the DC-3.

Both minimum and maximum estimates assumed average utilization of 450,000 miles per year per unit, and an average aircraft over the total commercial routes between United States terminals and overseas way-stations, with successive steps following a "reasonable pattern"; 100 percent schedule completion and no allowance for seasonal variation or irregularity in traffic volume.

Furthermore, these estimates of plane requirements were made "to furnish broad perspective on the scale of operations which might be indicated if all or the greater part of the first class surface mail included in the survey were diverted to the air."

Passenger Traffic Studied—Prepared by R. K. Abernethy, principal analyst, the survey was divided only to mail. F. H. Cresser,

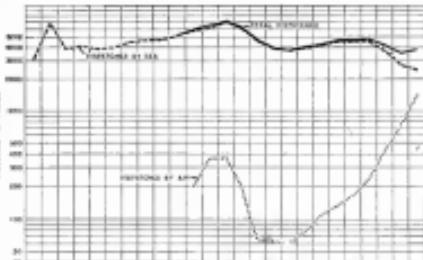
head of the division, disclosed, however, that a similar study of overseas passenger traffic has been started.

Cresser commented that the air service which would be furnished under the mail plane estimates "quite obviously" would provide substantial capacity for passengers and other types of traffic.

Despite its limitations to mail, the exhaustive study may be expected to wield a strong influence on the board. The need for mail routes obviously will be one of the leading factors on which the board must base its international route decisions.

Follows Mail Pattern—"Also, it seems reasonable to suppose that the

AIR MAIL AND LETTER MAIL DISPATCHER BY SEA
1940-1943



Air Mail's Transoceanic Gain This spread chart prepared by the CAB to accompany its survey shows the great gain in letter mail dispatched by air across the oceans. Note that the total mail by air approached that sent by surface vessel.

pattern of general air traffic can be expected to correspond roughly with the pattern formed by mail and news, both as to dispersion and relative volume.

The survey showed annual volume of United States mail sent to foreign countries and sent to foreign countries from the United States—\$900,000,000, of which 6.6 percent, or 58,212,000 pieces, were letter mail, 58.2 percent parcels and 35.2 percent parcel post. The \$900,000,000 million pounds of letter mail consists of some 100,000,000 individual pieces. Of this type of mail, about 2,400,000 pounds are dispatched across the Atlantic, 400,000 across the Pacific and 1,100,000 to Central America, South America and the West Indies. Canada was not included in the study because mail to the Dominion from the United States is not airborne.

Airmail payments to air transportation agencies for transport of letter mail only is approximately \$600,000,000.

Flight Round Trips—Maximum estimates (205 planes) were predicated on the assumption that one daily round trip will be operated to all countries in which 500 pounds or less of first class mail daily is dispatched from the United States, with additional schedules in excess of that amount to the extent required to establish average maximum mail load limits of 500 pounds.

This led to the finding that 331 planes would be required to service to Europe, Africa, the Near East and India, flying 160,400 miles a day and carrying 469 pounds of first-class mail per flight on the average. To the Pacific Ocean the figures were 80,000 miles, 500 pounds, 66 pieces required and one average pounds per flight. To the Caribbean-

Latin American area daily plane mileage was estimated at 66,000 for 33 planes carrying an average per flight of 385 pounds.

Maximum averages to all regions thus are 285,588 daily plane miles, 253 planes required and 331 average pounds per flight.

Mail Statistics—U.S. maximum estimates (202 planes), pounds per flight increased, while daily plane mileage and number of planes required decreased. These estimates were based on the assumption of a daily round trip service to all Caribbean and Latin America areas as serviced by American flag carriers and all other countries to which mail postage ranging from 30 to 1,000 pounds daily is dispatched excepting South Africa, Kenya and India (which involve long hauls and few in route mail potential) with additional schedules for mail in excess of 1,000 pounds a day on routes needed to establish maximum load limits of 1,000 pounds.

To Africa—Africa-Near East daily plane mileage would be 18,000, the number of planes required and the average pounds of first-class mail per flight 684 to Pacific Ocean; 66,000 plane miles daily 24 planes required and 485 pounds average mail load to Caribbean-Latin America 32,000 plane miles daily, 36 planes required and 403 pounds of mail average per flight. The average here for all regions showed that 342 planes would be required, flying 174,666 miles a day, with a load averaging 531 pounds of first-class mail per flight.

The estimated material included in the 43-page study covered volume distribution seasonal variation and trend of overseas mail, the num-

ber of pounds of United States airmail first-class mail, points and points paid, by ports of origin and countries of destination. Maps and charts indicated average daily volume of letter mail by sea and air to all overseas countries and a selection of principal international air routes of the world in operation during 1939.

DSC Rebuilding Brazilian Line

Douglas planes and U.S. mission seem to revived Condor carrier

The second of four new Douglas DC-3 transports leaves this week for Rio de Janeiro with personnel for an 18-month mission in Brazil, and large cargoes of spare parts, spare engines, radio equipment and other maintenance material.

The first plane of this air carrier left about ten days ago with the other two scheduled to fly within the next two weeks.

Arrangements for the project were concluded between the U.S. National Airlines and the U.S. Defense Supplies Corp. Stephen J. Morgan, vice-president of DSC in charge of the American Republics Aviation Division, has sent his chief technical advisor, Francis L. Dunstan, to Rio to be director of the mission. Dunstan was an American Airlines and Colonial Airlines official until he went with DSC two years ago.

Condor Expanded—Twenty-two American technicians, making up the nucleus, will help reconstitute the old German-Brazil airline, Condor, which is now the Cruzeiro do Sul of American Civil Airlines. Some 50 Germans in the organization were recruited from the airlines and the DSC technicians will assist in training replacements for these men. A pilot will check out the Brazilian pilots on the DC-3 transports.

The "de-Germanization" of Condor was one of the most difficult jobs DSC has undertaken. Condor was one of the most powerful and extensive lines in Latin America. The contract under which the mission is operating was signed last April and a group, including Dunstan, went to Rio to study the situation. Four Douglas transports had been allotted to the Brasil airline by the Army earlier in the year and deliveries are now being made in ten-day intervals.

Sold at Cost—The planes and parts have been sold to the Brasilian airline and the transfer does not come under lend-lease. Morgan, who has

been in charge of the American Republics Aviation Division since July, 1942, when W. A. M. Biddle came as aide to Secretary of Commerce, pointed out three tremendous advantages to Latin America in this system.

Defense Supplies Corp., he explained, sells at cost, makes terms which are easier to meet than those in private industry, and through their centralized material allotment from War Production Board, this is possible. Furthermore, WPA, the Army and the Comptroller General of the State Department are consulted by the American Republics Aviation Division in making allocations of materials to Latin America.

Last Nail Airliner—The four ships now being sold to Cruzeiro do Sul are the last planes the Army has allocated to DSC. The Corporation, however, is hopeful that the Army and Navy will soon have sufficient additional planes and equipment available to permit the expansion of the program in Brazil and other countries in the South whose air lines have been "de-Germanized." As a result of the DSC air transport program, there is only one remaining Axis airline—the Corporacion Sudamericana de Servicios Aereos in Argentina which is British owned.



RADIO-CONTROLLED AUTOMATIC PILOT DISCLOSED:

Radio-controlled motors in the tail of this Fortress operated the rudder and elevators after regular control cables from the pilot's cabin had been severed by a raiding Me262s. The AAF has persisted Minneapolis-Honeywell Regulator Co. to reveal that electronically controlled automatic pilots have been standard equipment on U.S. heavy bombers "for months," making it possible to control the plane from two or three posts. It was this device described by AVIATION NEWS' military commentator Aug. 2 which allows the bombardier to fly the bomber during a bomb run. The device has shortened the run and holds the plane to an unswerving course, necessitating immediately every cross current or variation.

New DPC Contract For United Aircraft

Summary of U.S. actions shows on wages, labor and construction contracts

Defense Plant Corp. gathered an increase in its contract with United Aircraft Corp., East Hartford, Conn., for additional facilities at a plant in Connecticut at a cost of about \$3,300,000, resulting in an overall commitment of approximately \$13,300,000. An increase of about \$13,300,000 in its contract with Rheem Manufacturing Co. for a new plant at Birmingham, Ala., which is being assembled for Consolidated Vultee, was authorized by DPC. Thus brings the overall commitment to about \$70,000,000.

DPC also increased its contract with Allis-Chalmers Fittings, Inc., to provide additional facilities at a plant in Pennsylvania at a cost of \$375,000, resulting in an overall commitment of approximately \$8,700,000. In all three cases, the company will operate the facilities, title remaining with DPC.

Stop Order Lifted—In January, when WPA halted a number of CAA airport projects, Kerner Field at

New Orleans was completed, except for lighting facilities. WPA has now taken over the airport and the plant may be completed at a cost of about \$1,000,000. Construction has been granted for airport facilities at Failes, N. D., at cost approximately \$110,000. A new facility of \$75,000 by the CAA for the Westchester County Airport at Rye Lake, N. Y., will permit completion of the airport part. It is now 95 percent complete and is limited now. A total of \$3,800,000 has been allocated for construction.

Engineering Contracts—The War Department awarded engineering contracts to two firms, one for \$900,000, the other for \$1,000,000, for construction of landing strip at Marion Field, an air strip at Fort Dix, N. J., and an air strip at Marion Field, N. C. An air strip at Fort Dix, N. J., will cost about \$900,000, and additional runways at a field in Carrollton, Ga., N. M., add up to about \$84,000.

Wage Increases Granted—Two further wage adjustments were approved by the NWLB. At the Wichita plant of Boeing Airplane Co., about \$600 officer and technical workers received approval of increases ranging from 10 to 15 percent. In all three cases, the company will operate the facilities, title remaining with DPC.

3

Aldworth Dies

Col. Richard Aldworth, World War II air force former commanding officer of Newark Airport, and originally known as civil flying, died last week at Kelly Field. He was 48. As a leader in civil aeronautics, Aldworth supervised drafting of regulations for control of commercial, military and private flying. He re-entered the Army two years ago and played a leading role in re-creating Air Forces personnel for the Flying Tigers. For that service, he was awarded the Legion of Merit.

Helicopter Deflated

Expectations of a helicopter "in every hangar" after the war are "only an advertising man's dream," considering the present stage of development of the many-winged craft. Charles F. Kettering, General Motors vice-president in charge of research and head of the National Research Foundation, told the New York Dayton air show last week.

"You may have helicopters some day," he pointed out, "but if you will examine them from a mechanical standpoint you will find we haven't got one yet that is practical. For military use yes, but not for commercial use."

No Fulfillment—Kettering's statement is in line with indications by

SAE Air Group Opens War Problems Forum

Production and field maintenance among topics, at Los Angeles.

Leading aeronautical engineers and meeting in Los Angeles this week to discuss aircraft, aircraft engines, propellers and accessories, aircraft production and field maintenance.

Principal speaker will be Brig. Gen. E. E. Adler, chief, Personnel and Training Division, Air Service Command, at the general session of the SAE National Aircraft Engineering and Production meeting.

Field Maintenance—The program calls for discussions of field maintenance, aircraft propellers and engines and interchangeable powerplants as Sept. 25, aircraft accessories and production, and powerplant installations. Oct. 1, aircraft engineering Oct. 2, in addition to

Harry Woodhead, president of Consolidated Vultee, will preside at the general session. Chairmen of other meetings include: George Stankev, Lockheed; A. L. Khan, Douglas; T. F. Bergman, Wright Aeronautical; C. L. Johnson, Lockheed; Gunnar Edschaert, Kinner Motors; A. E. Haymond, Douglas; John Young, North American Aviation and John G. Lee, United Aircraft Corp.

Motors—Part of a series of wartime engineering conferences, intended to production of maximum military equipment, are sponsored by the Society of Automotive Engineers and its four Pacific Coast



HURRICANE TANK BUSTERS:

British Information Services release this photo showing a ground crew serving RAF tank busters—Hurricane fighters equipped with 40-mm canons, photos heated under and protruding from the wings. These craft did their deadliest work in the North African campaign and are being held in readiness for the invasion.

AAF Shuffles Chiefs

Breerton expected to command U.S. tactical air force in England.

Transfers of general officers in key positions in the Army Air Forces continue with Maj. Gen. Lewis H. Brereton's future assignment giving rise to speculation.

Brereton, who has been commander of the Ninth Air Force in the Middle East theater, has been spotted by many authorities as the future commander of an American tactical air force in England to support large scale European operations from that country.

Maj. Gen. Ralph Royce, formerly commanding general at the First Air Force, now of the Ninth Air Force, will succeed Brereton in the Middle East and Maj. Gen. Edward O. Muster takes over the First Air Force.

Blaster has been commander of the Eighth Fighter Command in England. He directed assaults by the first unit equipped with P-47 Thunderbolts.

WTS Receives 250 Navy Trainees

Being sent aircraft being used for course now maximum of 7,000.

The Navy has turned over about 250 NINs primary trainees to the

CAA-War Training Service. The plane is based at the Naval Aircraft Factory and is similar in design to Boeing's NIN.

The first 20 planes were delivered at Seguin Naval Air Station, Seguin, Miss. At the same time, the Navy gave WTS some spare parts for the planes, according to W. L. Beck Nelson, technical assistant to Executive Director R. Leon Stewart.

WTS in Use—The most recent figures show that WTS is now using 5,335 planes in the program and that maximum number of planes for the courses—7,000—will be reached soon.

Operations of schools in WTS will now move right on the critical engine training station, which has expanded rapidly. WTS and War Production Board have issued directives permitting the production of more bearings for WTS ships.

During the last few weeks two new schools have been added to the program.

Navy Plane Expansion Faster than Army's

Delivers of combat craft double in 1943, and again in first half '43.

"Navy aircraft production is the fastest expanding segment in the nation's air-power building program," according to a Navy department production review, which adds that "No other portion of the great aircraft program has moved ahead as swiftly."



Eimac gets another "E"

Mass production of a device that has always been hand made in a laboratory is an achievement in itself. But when the whole nation gives pause to singular outstanding civilian成就 in this mass production the achievement becomes all the more striking.

Such honor has been bestowed upon the Eimac organization not once but twice. First to the San Bruno, California, plant (September 1942) and second, less than a year later, to a plant in Salt Lake City, Utah, that is little more than one year old.

Where does the credit go?... to the men and women at the Salt Lake City plant now for their recent triumph... and to the men and women of both plants always for their collective cooperation and hard work.

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Production of Navy planes used in the 18 months between Jan. 1, 1942, and July 1, 1943. Combat plane production started in 1942, and began in the first half of 1943. Between July 1, 1943, and July 1, 1943, the Navy completed 15,347 planes of all types, excluding those turned over to the Navy by the Army. Combined airplane weight amounted to almost 64 million pounds.

Combat Ships—The Navy has been concentrating on combat ships, accounting most of its non-combat aircraft through July 1, 1943.

Production pattern of the Navy has been to equal in six months the output of the preceding twelve months. In 1941, 1,584 planes were produced, while deliveries in the first half of 1942 totaled 1,601. The rate in Navy combat plane production, the report continues, has been so steep that deliveries in June, 1942, account for 10 percent of all planes turned out in the three years between July 1, 1940, and July 1, 1943.

Included in the combat aircraft classification are big four-engine patrol bombers as well as fighters. Unlike the Army's progress, however, Navy emphasis has been on combat bombers.

Helicon Production—Contracts for the first two experimental Navy Helicons were let in August, 1941. First production contract was signed

Dec. 4, 1941. War-bought licensees were embodied in the plant as its production proceeded, and the first Helicons were delivered late in 1942. In the first six months of 1943, monthly production has multiplied 10 times over total 1942 production.

Newest Navy fighter planes can fly in one minute five times the weight of projectiles that their 1942 predecessors fired.

Big Ordnance Development—In the first half of 1942, Naval ordnance deliveries, which started in January, increased to a total of 1,400,000. It increased to \$11,000,000 in the second half of 1942, and to \$12,000,000 in the first half of 1943. Aerial torpedoes and mines valued at \$55,076,586 are not included in the other ordnance figures.

The carrier *Eason*, a 27,000-ton ship, was completed in December. The carrier *Eason*, a 27,000-ton ship, was completed in December.

New Martin Plastic

Martin, a new electro-plastic material, a synthetic rubber and plastic, has a new material, is announced by Glenn L. Martin Co. It is a vinyl-type plastic with 100 percent resilience, and greater abrasion resistance, ability to stand continuous flexing without fatigue, and impermeability to gases and liquids, according to the company.



MODEL MAKING BECOMING BIG BUSINESS

Although the business world gives little thought to the thousands of hobbyists who build plane models, the aircraft industry depends on adults who are skilled in building test models for causing wind tunnel tests. Men who are skilled in the art are in demand because of the industry's boom. G.W. photographers caught these workers fiddling on experimental models of the P-51 Mustang.

100,000 Wasps Built By Pratt & Whitney

Latest engine displayed with No. 1, produced in 1943.

Production of the 100,000th Wasp engine was marked last week at the Pratt & Whitney division of United Aircraft Corp.

On exhibition for the reviewees, in which all employees and a group of Pratt & Whitney partner aeronautics participated, was the first Wasp engine, built in 1935, and currently numbered to 100,000. It increased to \$11,000,000 in the second half of 1942, and to \$12,000,000 in the first half of 1943. Aerial torpedoes and mines valued at \$55,076,586 are not included in the other ordnance figures.

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The seven current production engines, and fighter, biplane and transport planes powered by Pratt & Whitney engines, were also on exhibition both on the ground and in the air.

Tail Cone Speeds C-87

Device streamlines drag on Liberator transport, says George J. Newman, Division Manager.

Recent addition of a tail cone to the fuselage of Consolidated's Liberator *Eisenhower* project has increased the top speed of the plane, according to Division Manager George J. Newman, who added that the revision also simplified construction and reduces weight.

The transport, the C-87, is a modified version of the B-24 Liberator bomber and removal of the rear gun turret from the cargo compartment required that the opening be closed by a sheet metal fitting. Tests disclosed that considerable drag created by the flat fuselage could be eliminated by attaching a 30-in. cone-shaped extension. The new installation weighs about 11 pounds less than the old installation, Newman says also is reduced.

Pesco Pushes Research

Pesco, in advancing change in nose, reveals post-war study.

Coincident with its change of name to Pesco Products Co., Pung Kung-kiang Service Corp., of Cleveland says new products are under-

way, exhaustive tests in its experimental laboratory.

The company, which produces precision pumps and accessories vital to the hydraulic air and fuel systems of modern military planes has grown with the rapid expansion of aviation during its ten-year existence.

Test Ad Campaign—A test advertising campaign, scheduled to run in five or six trade papers will talk about the company's extensive production facilities, its ability to do research and engineering work which will be made available to wider fields. This campaign will run in addition to Pesco's current four-color institutional campaign, through Fuller & Smith & Bass.

NWLB Creates Panel For Airplane Cases

New set-up expected to speed consideration of many disputes.

An Airplane Repairs Panel has been created within the framework of National War Labor Board to handle all cases now pending and which may arise in the aerospace industry.

The panel, which will have representation of the public labor and industry, will hear and resolve all disputes among the aircraft industry, in modification centers, glider plants and subassembly plants and make recommendations to the full board.

The new organization is expected to speed up consideration of such cases as which there has been considerable delay—about 38 cases are now pending. At the same time it is predicted there will be representation on the panel with a knowledge of the particular and peculiar problems of the aerospace industry.

Plane Executives Meeting War Chiefs

Seniors precede joint conference of National Aircraft War Production Council.

Top-flight executives of the aircraft industry joined with leaders of labor, industry and the press in Washington this week for a series of conferences with Gen. George C. Marshall and other Army chiefs to receive confidential reports on war strategy and its relationship to production.

The conferences at the Pentagon

Building Sept. 27 and 28 are to be followed by a joint meeting Sept. 29 and 30 of the East and West Coast Aircraft War Production Council Members.

The unprecedented action of the War Department in calling industrial, labor and press leaders to sit in on their secret planning was seen in Washington as a move designed to combat the feeling in some industrial circles that war production is nearing a peak which will permit

some reconversion to peacetime economy.

The National Council members, following the general session, plan full discussions of the manpower situation and production problems generally in what are expected to be highly important and significant meetings affecting the entire future course of council activities. Virtually all kinds of mobile, round aircraft components are expected in Washington for these meetings.

Plane Industry Sets New Records As Congress Debates on Manpower

September production exceeds record August output, officials concede, with both unit and weight gains recorded.

While the manpower debate raged in Congress and elsewhere amidst a flurry of charges and counter-charges, the aircraft industry went right ahead producing the vital warplanes which figured prominently in the discussions.

August output, highest in the history of the industry, was unadjusted as of Aug. 31, 1943, and was understood to have been bettered by September with increases not only in units but in average weight of planes produced, indicating an upward trend in output of heavy bombers.

New Warplane Program—On the Labor-night Pacific Coast, the week saw the beginnings of the set-up for the new warplane program, although the system is not expected to be in operation for at least a month. As was expected, No. 1 labor priority, under the plan, went to aircraft with high-altitude ground attack and bombardment planes.

For V-25 flight, Los Angeles Air Commandant head, has had the United States Employment Service is staffed and organized to handle hiring on the West Coast, but recruits from there indicate otherwise.

Production Occupancy Committees were established in Los Angeles and Seattle during the recent western trip of WFB Executive Vice-Chairman Charles E. Wilson and a two-week "tightening up" campaign aimed at low labor priority industries rate over the prospect of shifting their warplane with aircraft production involving a more or less essential aircraft.

More Planes Needed—Wilson told more than 300 industrial leaders at a closed meeting in Los Angeles that "despite as it is, aircraft production in this area is not enough

Extra hands for him...
that leave him free to fly and fight

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THE AIR WAR

COMMENTARY

Big Air Push Near in Pacific; May Use Munda To Bomb Truk

Commentator foresees Hellfighters in action, with improved Dauntlesses and Avengers; more skip bombing ahead.

The stage is being set for a more extensive use of naval air power in the far-flung Pacific fighting. The carrier task force raid on Moresby Island was but the first "sample" of the heavy punches on the Japanese outer defense perimeter promised by Adm. Nimitz.

► **Devastating Raids** — Last week similar raids, also with carriers, were made on the Gilbert Islands. Despite big losses in the South Pacific the enemy is throwing in more planes by the hundred, forcing them from his big base at Truk in the Caroline Islands via Kwajalein, New Ireland, Rabaul, New Britain, to the smaller, scattered, scattered Islands, Buka, Balfate, Kasiki and a new one at Koro. This fairly large island in the northern Solomons is the last handle between newly occupied Munda and the important base at Rabaul and our air forces are hammering its air fields.

► **Enemy Losses Upset** — Sending all these planes to this area and replacing the very heavy losses inflicted by Gen. Kenney's Fifth Air Force in New Guinea has upset the enemy's plans for other areas. All air operations in the Solomons-Army, Navy and Marine Corps under the original command of Maj. Gen. George C. Kenney, head of the Thirteenth Air Force, and air attacks of increased weight may be expected shortly. Munda may soon be used as a base for heavy bomber missions against Truk, about 1,000 miles to the north.

► **Day Losses** — During the past year's operations the Japs have lost well over 2,000 planes in the South Pacific, and the ratio of losses has averaged 5 to 1, currently running at nearly 6 to 1. For fighter planes the Navy and Marine flyers in the Wright Corridor (PW) have a plane that gives them the mystery of the skies over the new version of the Zero and the still newer Type-01 and Type-2 fighters which they have recently encountered. The same goes for Army pilots using the Lockheed

► **Air Offensive** — In the coming air offensive, powerful blows will be struck by improved Dauntless (SBD-3) dive-bombers and Avenger (TBF) and Vought Seafire Seafire (SBD-3) will be in service, and despite the Truk raid report and the series of tough battles which tested this ship from the start, it is expected to pay off dividends before the Pacific shooting reaches a climax. It will be recalled that Adm. Jack Towers set the ship's basically high when he asked for a dive-bomber with sharply increased performance over the then current SBD model—in speed, range, bomb load and firepower. Pulling such a weight out of the aeronautical design hat, and then making it jump



BRITISH RELEASE NEW PICTURES OF GIANT GLIDER

Airborne troops, who have finished their training, line up to enter huge Airborne glider before a flight at an operational station. Also shown is interior of craft with "live load" of about 22 men. Largest C-46, piston in production is the Waco CG-4A, accommodating 15 men.



THE TOUCH OF TOMORROW IN THE PLANES OF TODAY



How Precise is Precision?

Maybe your yardstick is a fine watch. Give us a Ranger 12-cylinder in-line, uncoded engine. See the comparisons between the two listed below.

Volume battery of fine laboratory instruments, plus the genius of craftsmanship, are responsible for the Ranger's outstanding precision performance.

There's the spectroscope, for example—so sensitive it can spot a particle of metal as minute as seven parts in a hundred thousand. Fairchild uses it to explore and to control the metals in Ranger engines.

A quarter million volt X-Ray is another Fairchild key to secrets that are hidden beneath 4 inches of solid steel. It tells our engineers which metals can take it.

Under a magnified microscope our technicians can read the hours of any metal—till here it was processed during manufacture.

With electrical instruments they can detect a flat one ten thousandth of an inch in depth that could be a bottomless pit of danger.

A beam of black light is played over machined surfaces to expose the structural "cavities" that may lack within.

These and hundreds of other present day miracles are routine names for Ranger engineers and scientists. Result—the Ranger Engine, combination of precision and power, another Fairchild "touch of tomorrow" in the planes of today."

A QUARTER WATCH

PARTS—about 500.
PRECISION—measures one-thousandth part in a distance of 3/32 of 1 per cent of its diameter.

SPHERE of moving parts—balance wheel measures 3 hours per second.

A RANGER ENGINE

PARTS—about 500.
PRECISION—measures one-thousandth part in a distance of 3/32 of 1 per cent of its diameter.

SPHERE of moving parts—front pin endures 30 times per second.

BUY U. S. WAR BONDS AND STAMPS

FAIRCHILD

ENGINE AND AIRPLANE CORPORATION
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Fairchild Aircraft Division, Indianapolis, Ind. — Buffalo, N. Y.

Fairchild Aircraft Division, New York, N. Y.

through the production and operational losses proved to be a heavier assignment than it looked like a few months ago. It appears now that the bugs have been exterminated.

ECOSAURANCE

—is the P-51's

shooter, with its vast distances,

nothing is more important than

aircraft reconnaissance. It informs

the enemy of his weapons of surprise

and was one of the keys to the great

victories of Midway and the

Bataan. See Aeroplane in this

issue for the Navy's

Luftwaffe's designated P-51F and

a high speed, long range patrol

bomber, with the nose on patrol.

As a matter of fact, the Navy version

was stripped of much of its

weight in order to provide increased

range. Its speed and low fuel

power give it an excellent chance

of getting back if pounced by a flock

of Zeros.

Two other land based bombers

are used by the Navy in the

important anti-submarine warfare,

the North American Mitchell (AAF B-25) and the Vega Venture (AAF B-24, used largely by the RCAF Bomber Command). These dur-

able, powerful flying wings have

been specially equipped with sweet

anti-submarine armament.

P-Skip Bombing

—Another threat in the

Pacific air warfare will be an

increased use of maximum altitude or "skip" bombing whenever action comes within range, for example, of land-based Mitchell and Harvard, used with outstanding success in the Battle of the Bismarck Sea. The Navy is testing out this technique and is understood to regard it as a used variant of the serial torpedo attack under certain conditions.

The overall picture on naval aviation looks good. With better planes than ever, and with the introduction of the F4U Corsair, the Marine

is heading toward a strength of more

than 37,300 aircrafted since time

ago, and with stepped-up training

program moving along as scheduled,

there are equals ahead for the Jap naval air arm.

* * *

AIR WAR REVIEW

—History was made on the Salerno beachhead where our Fifth Army rallied and moved in the attack again under aerial support during which Gen. Eisenhower's tactical and strategic air forces aided to there fall right against the enemy. The Nazis having made their try, reserves exhausted, went on the defense.

■ **Bad Boat**—While our naval units supported the ground forces with intense fire, our tactical air forces were initially hampered by the dis-



South Pacific Ambulance Naval Air Transport Service Douglas DC-3s in the Pacific carry freight, mail, and casualties from the front. A wounded man is being taken off a transport near a hospital.

tance of no bases in Sicily and far south. Reinforcements in men, guns and munitions poured on the beach, holding our strength and that of the Fifth Army. Aircrews, Bombers, heavy and light, dive bombers, fighters, every plane which could be gathered from North Africa and Middle East accepted on Naval ports, airfields, gun positions, camp movements. They drove the Nazi from the air, this time far south and the Fifth Army moved on.

Energy continues in our possession man are being rushed to reconstruction by our engineers.

■ **German Supply Line Cut-off**—On the European Front, the RAF and the Eighth U. S. Air Force targeted with hard blows the Berlin line of marshaling, the Berlin railway, the western entrance of the Mt. Cenis Tunnel, eroding the Lyons-Turin railway which, since the German Panzer bombing, had to take much of the burden of German supply to Italy. The attack was coupled by blasting of the railway viaduct near St. Remy on the French Riviera, linking Lyons, Narvik and Genoa.

Events in Europe, while important and significant, should not eclipse Gen. MacArthur's brilliant victory in New Guinea, where first Bismarck and then Leyte saw enemy strongholds fall in quick succession. In America and Australia troops were in a massive raid by swift two-engine Mosquito bombers on picked targets. Heavier waves of four-engine planes bombed a rubber factory at Mattoon, 40 miles north-west of Vicksburg.

Narrator

Trail Blazing in the Skies

1924



THE FIRST USE OF DURALUMIN IN AIRCRAFT

— by a private American manufacturer — was in the fuselage of the Army semi-rigid airship K-51, built by Goodyear in 1924. So little was then known of the technique of working duralumin, Goodyear engineers spent a year developing methods of forming, heat-treating and riveting the metal — before beginning work on this fuselage. Many of these practices pioneered by Goodyear are now standard in duralumin aircraft construction.

HOW GOODYEAR AIRCRAFT CORPORATION SERVES THE AIRCRAFT INDUSTRY

1. By manufacturing airframe assemblies to manufacturers' specifications.
2. By supplying parts for all types of aircraft.
3. By re-engineering parts for mass production.
4. By extending our research facilities to aid the solution of any design or engineering problem.
5. By building complex aircraft and airships.

1943



"KNOW-HOW" IN AIRCRAFT
METAL WORKING IS THE SECRET of Goodyear's ability to serve airplane manufacturers today in the design (or redesign) and manufacture of all types of parts and subassemblies. Now Goodyear is producing wings, flaps and control surfaces for all types of warplanes from her fighters to the mightiest bombers. And in addition Goodyear, along with other companies, is building for the Navy the speedy Vought-designed "Corsair" — the agile fighter that is literally flying circles around the mighty Zero.





WHERE RESCUE RIDES ON LIGHTNESS

Lighter than any other save. From all-metal, self-locking nuts save from 60 to 80 pounds of weight on a single 4-engine bomber. This saving is sufficient to enable that bomber to carry a 7-man rubber life raft with 30 days' emergency rations, signal, repair and first aid kits, outer rope, sail, search knife, pistol, folding sack, whistle, boiling bucket, sea anchor and turpentine. Total weight 70 pounds.

Boots Nuts meet the exacting specifications of all government agencies and are used on every type of U. S. aircraft. They withstand severe plane vibration and the corrosive action of oil, salt water or chemicals. They can be used again and again—literally "outlast the plane."

"They Fly With Their Boots on—Light!"

BOOTS

Self-Locking Nuts For Applications In All Industries

ARMED AIRCRAFT KIT CORPORATION • GENERAL OFFICES: NEW YORK CITY • CHICAGO

AVIATION NEWS • September 25, 1943

AIRCRAFT PRODUCTION

1943 Plane Output To Exceed 85,000; Industry Employment Is 1,600,000

President's reference to 15,000 units in two months highlights contrast of 3,623 craft in 1938.

By SCOTT HERSHEY

The almost incredible job being done by the aircraft manufacturing industry has been no better pointed up than by a brief sentence in President Roosevelt's report to Congress on progress of the war when he said that during the two months' recess of Congress, approximately 15,000 airplanes were produced.

Put production figures from the industry emphasis there even more when it is considered that we produced only 3,623 airplanes in all of 1938, or when about 1,000 were military craft. The total in 1939 was 6,118, of which about 3,800 were military airplanes. In 1940, the industry produced only 12,581 airplanes, of which 6,600 were military planes, set as many airplanes during the entire year as were produced during the two months Congressional recess.

• **1943**—By 1943, the industry was beginning to hit its stride and the output was nearly 25,000 airplanes, of which about 4,000 were civil aircraft. But plane production was gathering momentum and year end reports for 1942 showed more than 44,000 airplanes produced, of which about 1,000 were civil aircraft planes. The estimates for the year place the total at between 85,000 and 88,000, and this from an industry which five years ago managed to turn out only 3,623 planes.

Back in 1938, the aircraft, engine and propeller plants employed about 44,300 people—not as many is the whole industry as now labor in some single plants. The trend upward in numbers of aircraft workers was comparatively slow, but at the beginning of this year there were nearly a million and the miles-employee mark has long since been passed, with women contributing greatly to the total of approximately 1,600,000.

• **1943**—Douglas Hangar—Weekly payroll for the industry totaled 51,522,723 back in January, 1939, and the industry altogether occu-

pies 1,600,000 airplane engineers have been delivered since the aircraft program started in May, 1940. Adding emphasis to this achievement was the note that 32,000 of these airplanes were produced during the first eight months of this year.

Despite this magnificent job the industry's work is not yet done. The President's report to the 1943 airplane production is still not good enough. We need not only to catch up to schedule, but to surpass it.

Precision program spread from now on, however, will be gratified, as was production generally, begin to approach capacity with the peak in aircraft production expected about the middle of next year.

Secs Market for Small Transports

Edward Warner sees "real" potential airline mileage suitable

Although the giant transport is catching the imagination, there is a vast range of potential air routes all over the world which could make good use of transport planes of **President's Report**—The President's report disclosed that 120,000



BUCK MASS PRODUCING PRATT & WHITNEY'S

Buck Motor Division of General Motors Corp., releases this photo to show it is turning out Pratt & Whitney 1,339 to eighth. Fourth quarter output is scheduled to jump 26 percent. Shown are finished engines on assembly floor, awaiting packaging and shipment to Willow Run, Douglas and Consolidated plants producing Liberators.

economically enough.

► **Profitable Payloads Preferred**—So says Dr. Edward P. Werner, CAA vice-chairman. Although regarding that experience with the cost per unit of payload an operating small aircraft as a transport service has not been very encouraging, Dr. Werner believes that future regulations must differentiate between large and small transports, even though all are in commercial service.

Indicating that such changes will be necessary to permit full service, Dr. Werner says many firms elsewhere throughout the world are rendering vital services to large areas, but they would be compelled to expand operations if required to meet all standards now laid down for U.S. carriers.

Assuming that in many cases single-engined aircraft could be used for air carrier service, with certain changes in regulations, Dr. Werner cited the possibility of relaxing the standards of single-engine performance for twin-engine planes used on level runs in light traffic.

At any rate, there will be many routes on which a choice must be made between having no air transportation at all and having a less than assured service, just as an less traveled air route, where vehicles lack elaborate safety and comfort features.

ARCO Chiefs Study Contract Priorities

War Zone planes will receive consideration on manpower.

The decision as which war contracts are the most important on the West Coast is occupying the armed services and the Aircraft Production Board at present, acknowledged T. E. Walker, director of Aircraft Resources Control Office, clearance agency for AAF and Navy Bureau of Aeronautics.

Some plants will be placed at the top of the production priority list to be presented within the next month to the War Manpower Commission for their manpower priorities list.

► **Heavy Bomber Trend**—A production urgency committee has been organized in Los Angeles and manpower officials estimated that Seattle, San Francisco and Portland commands would soon be functioning.

The trend in production still stresses heavy bombers.

ARCO and the Aircraft Production Board are concentrating on these phases of West Coast man-

power problems in aircraft planning:

1. Housing units to be built;
2. Diversion of workers from other industries giving aircraft a preference;
3. Better Selective Service control which has been successful as far as extending the original all-day blanket deferment to another 60 days past Oct. 1;
4. Keeping key people who have been inducted into the service. Mr. Wright said, "I wouldn't let my Wright boys be 'fronted out' of any personnel they want back and has the backing of Undersecretary of War Robert Patterson on this project.

5. Getting pay rates up to competing industries.

► **Incentive Pay**—Incentive pay plans have not been abandoned, although the Aircraft Production Board realizes that the West Coast Aircraft War Production Council was right in many of the points they stressed against the plan. At Boeing, where present output is almost at peak, incentive already could be used. Boeing may be ready shortly for pay rates, now that labor's demands for pay credits in rates have been met. Labor originally demanded incentive until rates were agreed upon.

Adoption of 10-hr shifts would

mean an increase of 10 per cent in man hours with the same number of employees. Mr. Wright says, and the project, a favorite of Charles E. Wilson, has not been abandoned.

Labor boarding is induced by the cost-plus-Ford-fee contract, Mr. Wright admits, but sees no way of changing conditions without disrupting production.

New Goodyear Plant To Test Wings, Motors

\$3,300,000 hangar expected to be ready for operation about Dec. 15.

Construction of a new flight hangar at Goodyear Aircraft Corp., for testing wings and engines of Goodyear Corsair, Navy fighters, is scheduled for completion about Dec. 15.

A contract for the \$2,300,000 hangar, has been let and work is under way. It is being financed by the Defense Plant Corp. The hangar, adjoining the Akron airport, will be built without interior supports and will be equipped with three five-ton traveling cranes to carry standard assemblies within the building and to the flight areas.

The building is the fifth major structure in the Akron group.



THOUSANDS VIST BOEING PLANTS:

Seattle and Renton, Wash., plants of Boeing Airplane Co. opened their gates to families of their workers and thousands streamed past the rows of Flying Fortress bombers being produced. "Through these gates pass the most important war workers in the world."



COUNTER-ROTATING PROP:

AeroProducts Division of General Motors Corp. reported "large contracts" for mass production of dual propellers to be used on the new transports. The AAP only recently permitted the product to be photographed. This display was sponsored by AeroProducts at the Treasury's "Back to the Attack" Show in Washington. The GMC subassembly will continue production of three and four-bladed models. The prop on the hub was 16 ft. in diameter and "is suitable for an airplane of a P-51 type."

Convair Revises Plan On New Orleans Plant

Will produce PBV Corsair patrol bombers instead of new types.

Consolidated Vultee will produce the famous PBV Catalina patrol bomber at its New Orleans plant, rather than the previously announced flying boat of new design. ► **Both PBV Types**—Harry Woodward, president in announcing the expansion of production, said both the PBV flying boat and the PBV amphibian will be produced at the plant for the Navy's use in survey, reconnaissance and rescue work. The PBV has been active in all theaters of the war and is especially serviceable where air strips have not been established.

Originally the New Orleans plant was engaged by Nash-Kelvinator Corp. to turn out the wooden version of the Sikorsky flying boat similar to the passenger-cargo type now being flown on trans-Atlantic operations by American Export Airlines.

Midshift Movies

WHAT ARE THEY?

Says THE NEW YORK TIMES in a story headlined: "Movies In War Plants Get Abseconium," "Midshift Movies, put on during the lunch period, are Hollywood productions reprinted in 16mm size and rented from film distributors."



WHO USES MIDSHIFT MOVIES NOW?

Says WARREN INDUSTRY, in an article captioned: "Midshift Movies Yield Movie": "Movies for entertainment are fast becoming important supplemental aids to production . . . by an increasing number of companies."

WHERE ARE THEY SHOWN?

Says THE NATIONAL RECREATION ASSOCIATION in a booklet titled "Activities for War Workers": "The cafeteria or lunchroom offers an ideal substitute (for an auditorium). The employees in most places watch the movies while they eat."



WHAT KIND OF MOVIES?

Says Radio Station WABC'S WOMAN'S PAGE OF THE AIR: "Most war plant lunch hours last only half an hour . . . which leaves twenty minutes for the film . . . They show short subjects—OR two reels of a feature picture at a time—an adaptation of the old serial showings which definitely reduces absenteeism."

DO WORKERS LIKE THEM?

Naturally! Keeps their interest up, gives them lots to talk about, helps relieve the tedium of bench work by offering complete change of pace.



HOW CAN MY PLANT USE MIDSHIFT MOVIES—AND WHAT IS THE COST?

At the world's largest distributor of 16mm entertainment films, we are now supplying Midshift Movie programs—serials, features and shorts—to many leading war plants. All you need is a 16mm sound projector, war catalog, and a workshop, cafeteria or auditorium. Write us and we will send complete information by return mail. The cost is ridiculously low!

FILM
ENTERTAINMENT

100 West 45th Street, New York 19 • 6-7-14 for 16mm, Douglas 1, 11
131-135 W. 46th Street, New York 19 • 101 W. 47th Street, Los Angeles 10



NATIONAL AIRPORT SAVES SPACE:

As a partial solution to storage problems confronting the small Washington National Airport, J. Earl Stenshauer (right), assistant manager, converted the idea of using space at each end of an airfield. But Headley, airport manager, said, "It is a waste of labor and cost the airport 10,000 additional square feet of personnel space for storage of the material which he is stacking, and boxes, steel, canvas, etc. To rent the space would cost an estimated \$200 a year." In accordance with the practice of the airport of naming such projects for the men who build them, the spaces became Headley House No. 1 and No. 2.

he combination of all-cargo planes and pickup types—and time will be the key.

J. Stanton Urges Simplification—Another speaker, Charles J. Stanton, Civil Aeronautics Administrator, told the session: "Revolving in transportation is plainly under way." Stanton pointed out: "It must be made easier for people to leave to the air and not only that regulations must be simplified, as they concern the private user, but the aircraft itself must be simplified mechanically so that persons of varying technical knowledge can keep it in good safe flying condition."

The CAA, he said, is doing what it can to remove unnecessary restrictions but not below a minimum safety standard. Stanton, unusual in stressing the need for imports, estimated at \$300 a reasonable target to shoot at in the early post-war years. He guessed there will be 280,000 civil aircraft three years after the war is over and 500,000 in private, executive and military service by 1954.

If it weren't for the fact he'll control, planes would be in use that could fly from Washington to Mexico City in seven hours and the

border with the American Legion's Aviation Committee before the nation's independence last week.

The administrator's announcement by Charles Donahue, chief of CAA's Airports Division, Bensdolph McMillen, new chief pilot in the Federal Airways Service, was flying the CAA ship in which they made the tour.

Lines Show Big Gain In Plane Utilization

Survey for June shows industry flying 174 transports

Marked increases in aircraft utilization are reflected in a tabulation of average plane-hours of revenue operation each day by 17 domestic airlines. The number of planes in operation has remained virtually unchanged.

Increased traffic requirements have boosted the average to 8 hr and 56 min in June this year, whereas in the month of June a year ago it was 8 hr and 24 min.

Carrier Report—**ATA**—Trans World Airlines operated by the 13 airlines numbered 174 in June, as against 171 in June, 1943.

Longest hour-per-day gain was reported by Mid-Continent, which went from 5 hr and 44 min to 10 hr and 5 min. Highest average daily revenue operation last June was that of Eastern, with 12 hr and 1 min. Eastern also was high in June, 1943, with 10 hr and 36 min.

The table shows increases by individual lines:

Carrier	Hours per Day		
	June	June	June
AA	8.56	8.56	8.56
AAI	8.39	8.39	8.39
AAI & Associates	8.39	8.39	8.39
Continental	8.34	8.34	8.34
Eastern	12.01	12.01	12.01
Headley	1.00	1.00	1.00
Headley	1.00	1.00	1.00
Mid-Continent	9.00	9.00	9.00
Northwest	7.34	7.34	7.34
Northwest	7.34	7.34	7.34
Pan American-United	8.16	8.16	8.16
United	10.64	10.64	10.64
Western	8.00	8.00	8.00

The check showed most of the lines were operating the same number of planes last June as in the same month a year earlier. One exception was Island, which was flying two Beechcraft in addition to one Lockheed it operated in June 1943. National Airlines was using four Lockheed this year and two a year ago. TWA, on the other hand, flew 31 Douglas DC-3's in mid-1943, whereas it had 28 in June, 1945. Hawaiian Airlines in June this year

Lines Get 5 Planes

Five more Douglas are being turned back to service by the Air Transport Command. These will go to United, one to American and one to TWA.

Eight planes were returned earlier this month from the War Department only after the Post Office Department made the original disclosure and there was some confusion as to the number involved. It is expected that about 20 more will be returned before the end of the year.

Plans so that the main task now is simply one of keeping it functioning, and say they are ready and willing for the changeover to be made.

Personnel Problems—Other factors are involved, however, one being how kindly the airlines ought take to ATC supervision of the training system. Another is the question of personnel, what the Army will do about the highly trained men carrying out the program.

Initiate and Army men have been going over these matters thoroughly, and some experts see that the shift in supervision may be effected as early as Nov. 1.

ATA Studies New Army Liaison Body

Training projects require new agency to concern industry and military work.

The probable need for an agency to correlate work of the airlines in the war training programs with Army direction was one of the subjects set for discussion by the board of directors of the Air Transport Association at a meeting last week.

The Air War Training Institute, which has been the nucleus of Air Transport Command crews, has launched a successful previous and is as busy as ever. Some success might be required, however, to work between the War Department and the airlines in keeping the program functioning. Whether this would be the ATA or another agency is under discussion.

Other topics planned for consideration were management and termination of contracts; air contracts with Railway Express Agency, mechanized wage scales, airport gasoline rationing, and what legislation might be needed to facilitate reconstruction when peace comes.

National Board Meets

Officers and directors are re-elected, new members are elected.

National Airlines re-elected five officers at its annual directors' and stockholders' meeting at Jacksonville, Fla. They are G. T. Baker, president; H. S. Parker, Jr., vice-president; R. J. Kershaw, vice-president, operations; D. G. Bush, treasurer, and B. P. Forman, secretary.

Lockheed—A new officer is L. A. Lockhart, assistant secretary and assistant treasurer. All will serve another year, and were named at a meeting of directors.

Both directors and stockholders' meetings were held at the airline's headquarters at Jacksonville Municipal Airport. Directors elected are G. T. Baker, H. S. Parker, Jr., D. G. Bush, E. J. Kershaw, H. R. Playford, Paul Parry, K. P. Toland-Terrell, Jerome Waterman, Paul Scott, and William K. Jacobs, Jr.

Clipper Crash Report

The Civil Aeronautics Board, reporting on the crash of a Pan American Airways Boeing Clipper at Lubang, Portugal last Feb. 22, said its investigation disclosed "convincing evidence that the accident was caused by failure of any part of the aircraft, or by mistake, by a failure of the control system."

Wings Tip Down—Probable cause of the mishap in which 24 were killed and 34 injured was inadvertent contact of the left wing tip of the aircraft with the water (Tegas river) while making a descending turn preparatory to landing.

Capt. H. D. Sullivan, flight commander, stated after the accident that he had lost elevator control at the time of landing approach. Paris were salvaged and submitted, the board reporting that "no indication could be found in the wreckage of the control system which would account for any failure."

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SHORTLINES

Heavy investment of capital resources has been made by the airline to meet their basic needs. This is shown by the number of domestic air fares. Among the dust to decision, basic purchases in TWA, with an overall purchase of \$1,000,000 worth of bonds through its division in the American, has subscriptions for a \$1,000,000 loan, and in placing the division with "Bill More Bond," posted on evidence of its flagships.

Western's California-to-Canada route turned in a record-breaking 3,315,000 passengers in the month of August and a 43.51 percent increase in the same passenger volume over the same month a year ago. Robert D. Wall's general traffic manager, and equipped August revenue passenger mileage exceeded July by 22.15 percent.

Pennsylvania-Central says it carried more pounds of air mail in each scheduled departure from the Washington National Airport during August than any other airline. C. E. Kunkle, traffic manager, says the total was 811 pounds of air mail left Washington in August on PCA's 17 scheduled departures a day, compared with 719,000 on a 12-day schedule carried by American Knobell and his firm's air mail load for the month was 45 percent higher than for August, 1942.

American in the first seven months of 1943 flew 3,250,453,353 pound miles of air express—80 percent above the same period in 1942. The system also moved 10,000,000 pounds of air mail during the same period in 1943 to date in approaching 4,300,500,000.

Commercial resumed passenger service on Route 20 between Newark, Hoboken, and Cleveland, N. H. Elementary Airlines has been granted a permit to begin a new route from Tampa through Havana and Managua to Balikpapan. All American Airlines open service is to Nippon, W. W., recently authorized by the CAB, Sept. 27 on the pick-up route to Route 44.

Northwest, which has two planes and approximately 340 employees as of July 31, a reflection of war work, particularly that for the Air Transport Command, is overhauling the regular schedules of the airline.

TWA America has assigned as additional Sikorsky S-42 to its route between Miami and San Juan, Puerto Rico, increasing service by two round trips weekly in its instead of 16. One of the Sikorsky's additional flights goes on to Georgetown, British Guiana. A fifth weekly service also is to be opened to Kingston, Jamaica, from Miami, an extension of Clague service between Kingston and Port Au Prince, Haiti, and Miami.

Delta has set up a record for space utilization in its aircraft operating from Milwaukee. H. E. Seeling, Milwaukee's district traffic manager for Pennsylvania-Central, reports that the load factor for August was 68 percent.

"a new high mark for any service from Milwaukee." In August, 1942, it was 62.5 percent. More than 5,000 pounds of air mail and 7,284 pounds of express were carried from Milwaukee by PCA last month.

their cabins for passenger and cargo use.

Added to the delay of actual re-conversion will be the obvious delay of the government in preparing war equipment for sale to commercial airlines.

Their ability to begin production of new aircraft the moment peace is declared will give major factors a helpful buffer against the impact of war contract cancellations.

Douglas is Good Position—On the West Coast, Douglas Aircraft Company is viewed as being in the best position to meet post-war demands for commercial planes with plant capacity to use the use of Douglas DC-3s, the great war standard equipment of surface transportation the world, and the bigger C-46, which will shed battle dust to become again the DC-4.

Beech's production lines may be thrown without too great loss of time into ramped production of its pre-war four-engine Stratoliner model. Leichfield undoubtedly will be well-suited for commercial production of its Constellation series for TWA by the time peace is declared.

While in Los Angeles, Cray spoke before the Advertising Club and predicted:

"In ten years, air travel will become so heavy that all terminals such as Idlewild in New York will be handling as much as 8,000 seat passengers a day. This will add with the total cost of rebuilding many parts of war transports, many of which will have been up to 14,000 hours of rough handling in military service, and rebuilding completely

new aircraft the moment peace is declared. The cost of new planes will not be so great as to add to the total cost of rebuilding.

Beech Application—Flight 50,000 ft may be anticipated. Its possibility is being studied now. The application of radar to commercial aviation will be a tremendous step forward in air safety. No plane will ever be "lost again." New radio equipment will make that now used as a milestone on a Model-T Ford. Instrument landing will be regular and safe."

Plane Speed Increased—"While air transportation today is four times as fast as surface transportation, it will be six times as fast after the war. You will cross the continent in twelve hours and in another twelve the Atlantic."

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Airlines May Decline Post-War Army Planes

Conversion of used craft to civilian operation too costly, says Cray, of United.

Post-war offers by the government of transport warplanes for reconversion to civil use may be rejected by the nation's major airlines.

They may choose to buy entirely new equipment from factories already in mass production, for war use, of the types of aircraft that will be best suited to the primary phase of post-war air transport expansion, according to Harold Cray, United Air Lines vice-president in charge of traffic, in a Los Angeles speech.

Crazy Outlook—"Airplane factories will be able to turn out new airplanes, tailored to the individual requirements of airlines, faster than airlines will be able to reconstruct civilian planes now in war transport service," he said.

New Planes Cheaper—Cray indicated that the cost of new planes will not be so great as to add to the total cost of rebuilding.

Commercial resumed passenger service on Route 20 between Newark, Hoboken, and Cleveland, N. H. Elementary Airlines has been granted a permit to begin a new route from Tampa through Havana and Managua to Balikpapan. All American Airlines open service is to Nippon, W. W., recently authorized by the CAB, Sept. 27 on the pick-up route to Route 44.

Northwest, which has two planes and approximately 340 employees as of July 31, a reflection of war work, particularly that for the Air Transport Command, is overhauling the regular schedules of the airline.

TWA America has assigned as additional Sikorsky S-42 to its route between Miami and San Juan, Puerto Rico, increasing service by two round trips weekly in its instead of 16. One of the Sikorsky's additional flights goes on to Georgetown, British Guiana. A fifth weekly service also is to be opened to Kingston, Jamaica, from Miami, an extension of Clague service between Kingston and Port Au Prince, Haiti, and Miami.

Delta has set up a record for space utilization in its aircraft operating from Milwaukee. H. E. Seeling, Milwaukee's district traffic manager for Pennsylvania-Central, reports that the load factor for August was 68 percent.



PCA TAX BUREAU:

Perm-Central's tax department opened an office to employees at the line's main quarters at Washington National Airport during the preparation of income tax blanks. Shown in right foreground is Raymond Schermer, PCA pilot, in a close huddle with Hugh J. Mericle, one of five experts who helped out.

United List Issued

United Air Lines' School and College Service has issued a directory in leaflet form of sources of illustrative materials and information about air transportation as "free and inexpensive educational material," available from various airlines and other sources. Inquiries should be directed to United Air Lines, Clearing Station, Chicago.

PERSONNEL



Miller



Neuman

Central division with headquarters at Chicago. He succeeds Guy L. S. Miller (right), who goes to the West Coast as vice-president of the new Western Division.

Per American makes two appointments in the traffic department of the Atlantic division. George E. Warden, assistant manager of the New York Atlantic Division, has been named assistant to the traffic manager of the division. He is succeeded by Charles Cole.

Charles M. Janssen has been appointed chief engineer of Calver Aircraft Corp. at Wacko. Kauai. He is a great-nephew of Peter Pele Air Corp. Before his promotion he had been supervisor of Calver's communications engineering department. He is married and the father of a year-old daughter.

Bill Daniels, Star liaison assistant to the president of Northeast Airlines, to study post-war route development, equipment, and the handling of passengers, mail and express.



CONVAIR DIVISION CHIEFS CONVENE

Convening last week in the world's largest airplane factory—Consolidated-Vultee's plant at Fort Worth, Tex.—were the managers of 12 of 12 of Convair's divisions. Left to right, front row, are Warner Jones, Louisville, J. L. Kerley, San Diego; William Nelson, New Orleans; Executive Vice-President L. M. Ladson, who presided in the absence of Board Chairman Tens M. Gilders and President Harry Woodlief, and C. W. Cooley, Daytona, Calif.; Second row, Vice-President G. T. Lewis, W. A. Heppner, Miami; W. R. Lawrence, Tucson; J. W. Meissner, Nashville; D. C. Beatty, Elizabeth City, N. C.; Edward Shultz, Wayne, Mich.; R. J. McMahon, Allentown, Pa., and George J. Neuman, Fort Worth.

New Technical Review Unit

THE ARMY AIR FORCE is considering establishing a small committee of officers, with Navy aviation representation, to advise and rule on release of technical information to the press.

Such a move, whether by intelligence or public relations, is needed. There appears to be some confusion in review and censorship offices on what information has already been released, how much, and by whom. So, there is uncertainty as to what new clearance decisions may be made.

The result may be to question advisability of printing the information, even though it might

have appeared in print a year or two ago. Thus as a group of aviation specialists which could serve all government intelligence and review agencies does not exist.

Such a committee could be of immense aid to aviation. It could also act immediately on the basis of new information and authorize publication of new facts as soon as the need for further review on a technical item is ended. Britain has had marked success with such an official technical information review body and the AAF should set up a similar group of specialists.

Prospect for Local Services

THE AIRLINES will settle down September 23 to convincing CAB that local service is essential for the future. So will other companies which would like to compete with the present carriers for regional networks.

CAB's investigation of possibilities of local, feeder and pickup services will bring together the most important facts and statistics we have yet seen on scheduled flying, county by county.

It is no secret that some CAB people are convinced the large airlines have underestimated their local territories in charting post-war plans. The international field beckons, instead. The hearings starting this week should show who holds the best group of the problems which must be solved.

There is also the mistaken notion in some segments of the industry of thinking of local services solely in terms of supplemental systems feeding into the transcontinental trucks. If truly local air service ever arrives an important percentage of

air travelers will never board a transcontinental liner. The investigation should show this.

It should also result in agreement on one or two standard types of local service transport plane. If initial designing could be started shortly, and completed within a year, some observers are convinced production could then start immediately upon proper governmental approval. In the meantime, CAB would be completing route hearings to determine proper certificate holders.

Much, of course, depends on the first day's proceedings, when the CAB's economic and safety bureaus present their introductory material and the Aeronautical Chamber of Commerce submits its studies on local service problems. These exhibits may be surprising, certainly they will be interesting.

The proceedings should eliminate much prattle on a vital subject and prepare for the time when air transportation will serve all of the people.

A Patent Program That Works

ONE OF THE REMARKABLE and generally unnoticed features of the mighty aircraft production program in the Manufacturers Aircraft Association, which was organized in 1947 to establish cross-licensing of patents and simplify interchange of royalties and remains almost unchanged in its operation from World War I. Membership is open to all firms, and nine of the 40 leading companies belong. Some basic principles in the industry go back to the Wright Brothers. Although patents on these are held by a few companies, all others use them. Without cross-licensing lawsuits could threaten operations constantly. MAA itself, however, owns no patents, merely handling receipts and disbursements of license fees for members.

Recently, members have agreed to submit their

new patents to MAA arbitration boards, specially created for each patent case, which set the value of the patent and the royalty payment. If any, Raus has been to encourage employees to report their production ideas. Consolidated-Vultee is exerting special effort at its 12 divisions to gather the crop from ingenious inventors on its payrolls.

"The acceleration of inventions benefits the entire industry," an executive points out to the News. "At the same time the employees whose useful idea might otherwise never see light—or if it did perhaps without proper patent protection—has its own interests furthered and benefits aircraft production in the shortest possible time." The inventors receive a percentage of income derived by the company.

Hoover H. Wood



PRODUCTION ON SCHEDULE

The splendid performance of America's aircraft in World War II, is tribute to the men who make them...as well as those who fly them.

For it takes management, planning, engineering, procurement, tooling, training, skilled workmanship, and coordinated effort of the highest order to produce planes in adequate quantities...on schedule.

At McDonnell, we have met production requirements...on planes, parts, and plastics...on schedule. Behind this successful production performance is a well-rounded organization of talented aircraft executives, engineers, research workers, tooling

experts and production specialists...who have passed along the results of many years' experience to thousands of earnest, hard-working shop personnel.

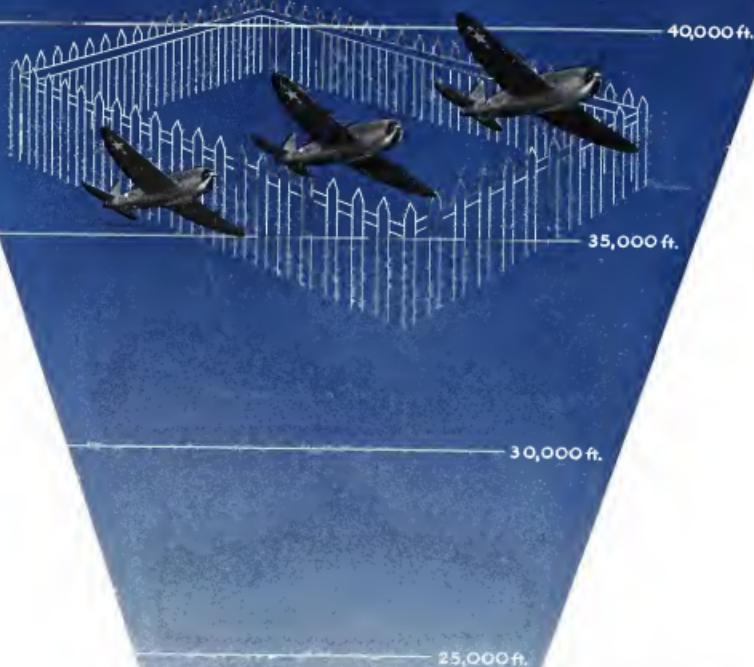
Two additional factors have contributed materially to our ability to meet production requirements on schedule: a record of never having had a week's stoppage due to disagreement between management and personnel or their collective bargaining representatives; and a policy of multiplying and facilitating production through sub-contracting as necessary.

We shall welcome further opportunities to serve our country's war effort.

MCDONNELL Aircraft Corporation

Manufacturers of PLANES • PARTS • PLASTICS • SAINT LOUIS - MEMPHIS

Our Back Yard is the Stratosphere



THUNDERBOLT'S OWN BACK YARD!



REPUBLIC
P-47 THUNDERBOLT

REPUBLIC
Aviation
SPECIALISTS IN HIGH-SPEED AIRCRAFT



MILITARY airmen know that this is the day of *specialized* planes... designed to do specialized jobs. Some planes are best for ground-strafing... others for medium-level fighting... and so on.

Our back yard is the stratosphere. The Republic Thunderbolt is built to fight at 35,000 feet and up. It protects high-flying bombers.

Powered with a 2,030 horsepower engine, the Thunderbolt flies at more than 400 miles an hour. Its turbo-supercharger assures greatest efficiency in the rarified upper air.

The stratosphere is the strategic area... the ceiling... of today's global air war. Because of the higher speeds it permits... and its freedom from turbulent weather... the stratosphere will be the favored path of tomorrow's high-speed transportation. Thus, the high-flying Thunderbolt anticipates happier things to come.

Republic Aviation Corporation
Farmingdale, New York—Evansville, Indiana